

II. SPECIFICATION AMENDMENTS

Page 1, before line 1, insert

(a) TITLE OF THE INVENTION

Page 1, line 3, insert

(b) CROSS-REFERENCE TO RELATED APPLICATIONS

Not Applicable

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
DEVELOPMENT

Not Applicable

(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
COMPACT DISC

Not Applicable

(e) BACKGROUND OF THE INVENTION

(1) Field of the Invention

Page 1, line 8, insert

(2) Description of Related Art including
information disclosed under 37 CFR 1.97 and
1.98.

Page 2, lines 21-22, amend

Usually the compressed mode transmission lasts many frames.
Figure 2 illustrates an example of periodically repeated
transmission gaps 211 according to UTRA specification 3G TS

25.215, Physical layer measurements {1}. The transmission gap length (TGL) is the duration of the transmission gaps 211. Usually TGL is expressed in numbers of time slots. According to 3G TS 25.215 specification, there are up to two transmission gaps within a transmission gap period (TGP). The repeated transmission gap periods are presented in Figure 2 with rectangles 220a, 220b and 220c. The transmission gaps within a transmission period are separated from each other by a transmission gap distance (TGD). The duration of the transmission gap period is an integer number of frames, and the duration of the transmission gap distance is an integer number of time slots. During the compressed mode operation, the transmission gap period is repeated for a certain number of times, and the pattern duration (PD) is a multiple of the number of frames in one TGP.

Page 5, line 25, to page 6, line 7, amend

In a code limited situation it is possible to reduce the spreading factor by two by using a secondary scrambling code with the new channelization code; see TSGRI#7(99)b27, Ericsson: "Use of multiple scrambling codes in compressed mode" TSG-RAN Working Group 1 meeting 7, Hannover, Germany, Aug. 30-Sep. 3, 1999 {2}.

The problem is using a secondary scrambling code is that the orthogonality of the channelization codes with a cell is lost. The interference caused by the transmission in the tow cell P_{intra} is increased compared to the interference caused by the surrounding cell P_{inter} . The target value for the signal-to-interference (SIR) in the transmission power control has to be increased considerably to ensure the quality of the transmission. As can be seen in Table 2, the required increase in the target value for SIR depends on the ratio P_{intra}/P_{inter} and on the channel

impulse response profile, which defines the orthogonality factor for the primary scrambling code. When the own cell interference is about the same as the interference caused by surrounding cells, i.e. $P_{\text{intra}}/P_{\text{inter}} = 0$ dB, the increase in the target SIR value is smaller than when $P_{\text{intra}}/P_{\text{inter}}$ is larger, i.e. when the mobile station is nearer the base station. A 3dB increase in the target value for SIR is due to reduction of the spreading factor by two.

Page 8, line 11, insert

(f) BRIEF SUMMARY OF THE INVENTION

Page 10, line 36, insert

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

Page 11, line 17, insert

(h) DETAILED DESCRIPTION OF THE INVENTION

Page 17, line 12, amend

~~[1] 3G-TS-2.5.215 Physical layer measurements~~

Page 17, lines 13-15, amend

~~[2] TSGR1#7(99)b27, Ericsson "Use of multiple scrambling codes in compressed mode" TSG-RAN Working Group 1 meeting 7, Hannover, Germany, Aug. 30-Sep. 3, 1999.~~

~~(57)~~ Abstract

A method (600) for preparing an interfrequency handover of a certain communication connection from a first frequency to a second frequency, ~~comprises the following steps of:~~ features periodically intermitting (603) the transmission/receipt of data on the first frequency for certain transmission gaps, ~~where the~~. The number of transmission gaps is at least one during each transmission period and a certain sequence of transmission periods (420, 520) is used, ~~and performing (607) measurements.~~ Measuements are performed (607) on the second frequency during the transmission gaps on the first frequency. In the step of intermitting the transmission/receipt of data the transmission/receipt of data is intermitted within at least on transmission period for a certain transmission gap (311, 411) having a first duration and for a certain second transmission gap (312, 412) having a second duration, ~~which.~~ The second duration is different from the first duration. A mobile station (700), a network element (710) and a network control element (720) are also presented.

~~Figure 3.~~